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[54] **AUTOMATIC ROUTING AND INFORMATION SYSTEM FOR TELEPHONIC SERVICES**

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[51] **Int. Cl.**[7] **H04M 3/42**

[52] **U.S. Cl.** **379/220**; 379/211

[58] **Field of Search** 379/201, 207, 379/211, 219, 220, 221, 127, 113

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[57] **ABSTRACT**

A system and method for automatically and seamlessly routing telephone calls across a telephone network. The system includes a telephone network interface box having a computer, a master file and client file stored in the computer. The master file is dynamically linked to the client file at routing time to produce a selected client location telephone number which is transmitted across the telephone network. The system utilizes Automatic Number Identification to identify the calling party. The master file has a plurality of records having a telephone number and a spatial key and is updated frequently. The client file has a plurality of records having a spatial key and a client telephone number. Methods of generating client file records for both radius and polygon defamed service areas through an automated computer process are included in the present invention. Another embodiment of the system merges the records of the client file with the records of the master table to generate a single table to create a one table system. The one table system increases speed of the call routing process. A second embodiment of the one table system is provided by a special case of the client file build process which yields a caller telephone number to service location telephone number file. A further embodiment provides real-time processing in situations where high call volumes and transaction processing speed are not a major issue. The real-time processing system is simple to update and requires minimal storage.

46 Claims, 43 Drawing Sheets